

Serial No. 09/677,134
Response to Office Action Mailed December 16, 2005

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Amendments to the Claims:

The listing of Claims will replace all prior versions and listings of the Claims in the application:

Listing of Claims

1. (Currently Amended) A distributed data storage system for a netcentric computing system, comprising:
 - a plurality of database servers;
 - a plurality of data stores each in communication with one of the database servers, wherein the database servers are operable to access the data stores;
 - a client communicating with the database servers, wherein each of the data stores includes a predetermined portion of the data used within the netcentric computing system;
 - a central data store in communication with at least one of the database servers, wherein data representative of the predetermined portion of the data included in each of data stores also resides on the central data store,
 - wherein the predetermined portion of the data in each of the data stores is a replicated portion of the data that resides on the central data store that has been segmented horizontally with a segmentation key, and also segmented vertically to form the predetermined portion of the data included in each of the data stores, wherein the segmentation key is operable to uniquely identify records in the central data store; and
 - a webserver in communication with the client to act as the primary interface between and the client and the database servers.
2. (Original) The distributed data storage system of claim 1, wherein the client communicates with the database servers using a web browser application.
3. – 9. (Canceled)
10. (Currently Amended) A segmented data distribution system for data accessed by clients in a netcentric computing system, comprising:
 - a plurality of database servers;

Serial No. 09/677,134
Response to Office Action Mailed December 16, 2005

Filing Date: September 29, 2000

a plurality of data stores in communication with the database servers;

a database located within each of the data stores, wherein ~~each of the databases in~~ each of the data stores are representative of a segment of the data in the netcentric computing system, and wherein the data is horizontally segmented with a segmentation key and also vertically segmented to form the segment of data included in each of the databases, wherein the segmentation key is operable to uniquely define records across the database in each of the data stores;

a network for communication with the database servers; and

a webserver for communication within the network to provide access by the clients to the data.

11. – 13. (Canceled)

14. (Currently Amended) A replicated data distribution system for data accessed by clients in a netcentric computing system, comprising:

a central database server located at a central site;

a central data store in communication with the central database server;

a local database server located at a local site in communication with the central database server; and

a local data store in communication with the local database server wherein the local data store is populated with replica data of the data within the central data store[.], and wherein the central database server is operable to limit the replica data to a predetermined amount of data by horizontal segmentation of the data within the central data store based on a defining key uniquely definitive of records in the central data store and the local data store, and also by vertical segmentation of the data within the central data store;

wherein the central database server is further operable to store transaction related data updates in the central data store and publish the data updates to the local database server to update the replica data in the local data store in response to a pre-determined threshold level of data updates being reached;

a network for communication with the local database server and the central database server; and

Serial No. 09/677,134
Response to Office Action Mailed December 16, 2005

Filing Date: September 29, 2000

a webserver for communication within the network to provide the primary interface for the clients to access the data within the netcentric computing system.

15. (Original) The replicated data distribution system of claim 14, wherein the communication between the central data base server and the local database server is via the network.

16. (Original) The replicated data distribution system of claim 14, wherein the replication is by unidirectional updates.

17. (Original) The replicated data distribution system of claim 14, wherein the replication is by bi-directional updates.

18. (Currently Amended) A method of distributing data for use by clients in a netcentric computing system, comprising:

identifying the data needs of a plurality of data entity groups within the netcentric computing system;

identifying predetermined portions of the data to be used by the data entity groups;

segmenting the data horizontally with a segmentation key that identifies records within the data, and also vertically segmenting the data to obtain the identified predetermined portions;

replicating only the identified predetermined portions;

distributing the replicated predetermined portions of the data to a plurality of data stores;

communicating with the data stores with a plurality of database servers; and

interfacing the database servers with the data entity groups using a webserver.

19. – 22. (Canceled)

23. (Currently Amended) A method of distributing data for access by clients in a netcentric computing system, comprising:

determining a plurality of segmentation parameters that comprise a plurality

Serial No. 09/677,134

Filing Date: September 29, 2000

Response to Office Action Mailed December 16, 2005

segmentation keys that are each uniquely definitive of records included in the data;

performing vertical and horizontal segmentation of the data based on the segmentation parameters, wherein the horizontal segmentation is operable to identify records included in the data based on one of the segmentation keys;

storing the segmented data in a plurality of data stores;

communicating with the data stores with a plurality of database servers;

interfacing the database servers with a plurality of clients using a webserver; and

selectively accessing the database servers depending on data requests initiated by the clients.

24. (Canceled)

25. (Currently Amended) The method of claim 24 wherein the segmentation parameters comprise ~~a plurality of segmentation keys and the~~ an origin of the majority of the data requests.

26. (Canceled)

27. (Original) The method of claim 26 wherein the segmentation parameters comprise determination of a plurality of related subject matter areas.

28. (Currently Amended) A method of distributing data for access by clients in a netcentric computing system, comprising:

storing data in a central database;

determining a plurality of segmentation keys that uniquely identify records included in the central database;

replicating a predetermined portion of the data by both horizontally and vertically segmenting of the data to create replica data, wherein the horizontal segmentation is performed based on at least one of the segmentation keys;

transferring the replica data to a corresponding first local database and a second local database using a network; and

updating the data in the central database;

Serial No. 09/677,134
Response to Office Action Mailed December 16, 2005

Filing Date: September 29, 2000

storing the updates to the data in the central database until a predetermined threshold of updates is reached;

publishing the updates to the first and the local database with the central database in response to reaching the predetermined threshold;

the first local database publishing the updates to the second local database in response to receipt of the published updates from the central database; and

accessing the data and the replica data using the network and a webserver.

29. (Currently Amended) The method of claim 28 further comprising the act of updating the data unidirectionally such that the first and second local databases are-is read only and updates to the replica data are performed in the central database.

30. (Currently Amended) The method of claim 29 further comprising the act of requesting an update to the replica data within the first and second local database from the central database.

31. (Original) The method of claim 29 further comprising the act of creating a snapshot of the data within the central database that corresponds to the replica data when the replica data is transferred.

32. (Currently Amended) The method of claim 31 further comprising the act of subsequently updating the first local database with replica data that is replicated from the central database following an update of the data in the central database that corresponds to the snapshot.

33. (Currently Amended) The method of claim 31 further comprising the act of subsequently updating the first local database only with changes to the replica data based on the snapshot.

34. (Canceled)

35. (Currently Amended) The method of claim ~~28~~34 further comprising the acts of monitoring the publications of replica data with a local database server, and updating the

Serial No. 09/677,134

Filing Date: September 29, 2000

Response to Office Action Mailed December 16, 2005

corresponding first or second local database with replica data when the replica data that was published is an update to the replica data in the first or second local database.

36. (Currently Amended) The method of claim 28 further comprising the act of updating the central database and the first and second local database using bi-directional replication.

37. (Currently Amended) The method of claim 28 further comprising the act of updating the central database and the first and second local database using selective replication.

38. (Original) The method of claim 28 further comprising the act of updating the central database with a remote log-on approach.

39. (Original) The method of claim 28 further comprising the act of updating the central database with a remote batch approach.

40. (Original) The method of claim 28 further comprising the act of updating the central database with a local checkout approach.

41. (Currently Amended) The method of claim 28 further comprising the act of updating the central database and the first and second local database using a local update strategy.

42. (New) The distributed data storage system of claim 1, wherein the central data store is operable to store updates to the data until a pre-determined threshold of updates to the data is reached, one of the database servers in communication with the central data store operable to selectively publish the updates to the data stores to update the predetermined portion of data included in the respective one of the data stores, in response to the pre-determined threshold being reached.

43. (New) The distributed data storage system of claim 42, wherein one of the database servers in communication with one of the data stores is subscribed to the one of the database servers in communication with the central data store, so that the one of the database

Serial No. 09/677,134

Filing Date: September 29, 2000

Response to Office Action Mailed December 16, 2005

servers in communication with one of the data stores is operable to receive the published updates and re-publish the updates to the other databases servers subscribed thereto.

44. (New) The segmented data distribution system of claim 10, wherein one of the database servers is a central database server and one of the data stores is a central data store that is in communication with the central database server, and wherein the database included in the central data store replicates each database within the other data stores, and wherein changes to the database included within the central data store are storable as transaction updates that are publishable by the central database server for receipt by the other database servers when a predetermined threshold of transactions updates is reached, the other database servers subscribable to the central database server to monitor for relevant transaction updates.

45. (New) The replicated data distribution system of claim 14, wherein the central database server is further operable to publish only those transaction related updates that affect the replica data populated in the local data store.

46. (New) The method of Claim 18, further comprising receiving a plurality of updates to the data, storing the updates until a predetermined threshold of updates is reached, and selectively distributing the updates to the corresponding data stores to update the replicated predetermined portions of the data.

47. (New) The method of Claim 46, further comprising receiving the distributed updates with one of the data stores and distributing the received updates with the one of the data stores to another of the data stores.

48. (New) The method of Claim 46, wherein distributing the updates comprises distributing the updates to only those data stores with replicated predetermined data to which the updates apply.